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Atty. Dkt. No. SPRUS1120 (026470-0301)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David L. Morris
Title: METHOD FOR ISOLATING
HEPATOCYTES
Appl. No.: 10/517,017
Filing Date: 9/17/2004
Examiner: Unassigned
Art Unit: 1723
Conf. No. 8753

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INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

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Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicant in order to comply with Applicant's duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to

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antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicant respectfully requests that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872.

Respectfully submitted,

Date 1/6/06

By Stephen E. L.

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Sheet 1 of 3

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Application Number	10/517,017
Filing Date	9/17/2004
First Named Inventor	David L. Morris
Group Art Unit	1723
Examiner Name	Unassigned
Attorney Docket Number	SPRUS1120 (026470-0301)

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1	3,970,518		Giaever	07-20-1976	
	2	4,219,411		Yen et al.	08-26-1980	
	3	4,375,407		Kronick	03-01-1983	
	4	4,452,773		Molday	06-05-1984	
	5	4,710,472		Saur et al.	12-01-1987	
	6	4,855,045		Reed	08-08-1989	
	7	5,108,933		Liberti et al.	04-28-1992	
	8	5,514,340		Lansdorp et al.	05-07-1996	
	9	5,536,475		Moubayed et al.	07-16-1996	
	10	5,795,470		Wang et al.	08-18-1998	
	11	6,136,525		Mullon et al.	10-24-2000	
	12	6,610,288		Edge et al.	08-26-2003	
	13	2003/015474		Sterman et al.	01-23-2003	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	14	EP	0 670 185		Lansdorp	09-06-1995		

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	15	AGELLI et al., <i>Putative liver progenitor cells: conditions for long-term survival in culture</i> , Histochemical Journal (1997), pp. 205-217, Vol. 29	
	16	AMBROSINO et al., <i>Hepatocyte Transplantation: An Experimental Study to Treat Acute Liver Failure in Pigs</i> , Transplantation Proceedings (2001), pp. 62-65, Vol. 33	
	17	ARZA et al., <i>A Compared Study on the Purification of Fetal and Adult Rat Hepatocyte Suspensions by Biomagnetic Isolation Techniques and Flow Cytometry Analysis</i> , Cell Biology International 2001, pp. 1285-1289, Vol. 25	

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	18	AVITAL et al., <i>Isolation, Characterization, and Transplantation of Bone Marrow-Derived Hepatocyte Stem Cells</i> , Biochemical and Biophysical Research Communications (2001), pp. 156-164, Vol. 288	
	19	BACCARANI et al., <i>Isolation of Human Hepatocytes From Livers Rejected for Liver Transplantation on a National Basis: Results of a 2-Year Experience</i> , Liver Transplantation, May 2003, pp. 506-512, Vol. 9	
	20	CALISE et al., <i>Intrasplenic Hepatocyte Transplantation in the Pig: New Technical Aspects</i> , Transplantation Proceedings (1997), pp. 1999-2001, Vol. 29	
	21	CARUANA et al., <i>Isolation of Human Hepatocytes after Hepatic Warm and Cold Ischemia: A Practical Approach Using University of Wisconsin Solution</i> , Cryobiology (1999), pp. 165-168, Vol. 38	
	22	DEMETRIOU et al., <i>Transplantation of Microcarrier-Attached Hepatocytes into 90% Partially Hepatectomized Rats</i> , Hepatology, 1988, pp. 1006-1009, Vol. 8, No. 5	
	23	DONINI et al., <i>Hepatocyte Isolation Using Human Livers Discarded From Transplantation: Analysis of Cell Yield and Function</i> , Transplantation Proceedings (2001), pp. 654-655, Vol. 33	
	24	DUNN et al., <i>Multiple intrasplenic hepatocyte transplantations in the Dalmatian dog</i> , Surgery, February 2000, pp. 193-199, Vol. 127	
	25	FIEGEL et al., <i>Characterization of Cell Types During Rat Liver Development</i> , Hepatology 2003, pp. 148-157, Vol. 37, No. 1	
	26	FISHER et al., <i>Defining Hepatocellular Chimerism in a Liver Failure Patient Bridged with Hepatocyte Infusion</i> , Transplantation, January 27, 2000, pp. 303-307, Vol. 69, No. 2	
	27	FOX et al., <i>Treatment of the Crigler-Najjar Syndrome Type I with Hepatocyte Transplantation</i> , The New England Journal of Medicine, May 14, 1998, pp. 1422-1426, Vol. 338, No. 20	
	28	GIBBONS et al., <i>Waiting for organ transplantation: results of an analysis by an Institute of Medicine Committee</i> , Biostatistics (2003), pp. 207-222, Vol. 4, No. 2	
	29	HENGSTLER et al., <i>Cryopreserved Primary Hepatocytes as a Constantly Available In Vitro Model for the Evaluation of Human and Animal Drug Metabolism and Enzyme Induction</i> , Drug Metabolism Reviews (2000), pp. 81-118, Vol. 32, No. 1	

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	30	HUI et al., <i>Bioartificial liver support</i> , Journal of Hepatobiliary Pancreatic Surgery (2001), pp. 1-15, Vol. 8	
	31	KAUFMANN et al., <i>Long-Term Hepatocyte Transplantation Using Three-Dimensional Matrices</i> , Transplantation Proceedings (1999), pp. 1928-1929, Vol. 31	
	32	MALHI et al., <i>Hepatocyte transplantation: new horizons and challenges</i> , Journal of Hepatobiliary Pancreatic Surgery (2001), pp. 40-50, Vol. 8	
	33	MITRY et al., <i>Human Hepatocyte Isolation and Relationship of Cell Viability to Early Graft Function</i> , Cell Transplantation (2003), pp. 69-74, Vol. 12	
	34	NITOU et al., <i>Purification of Fetal Mouse Hepatoblasts by Magnetic Beads Coated with Monoclonal Anti-E-Cadherin Antibodies and Their In Vitro Culture</i> , Experimental Cell Research (2002), pp. 330-343, Vol. 279	
	35	OHASHI et al., <i>Hepatocyte transplantation: clinical and experimental application</i> , Journal of Molecular Medicine (2001), pp. 617-630, Vol. 79	
	36	SEGLEN, <i>Preparation of Isolated Rat Liver Cells</i> , Methods in Cell Biology (1976), pp. 29-34, Vol. 13	
	37	STRAIN, <i>Isolated hepatocytes: use in experimental and clinical hepatology</i> , Gut (1994), pp. 433-436, Vol. 35	
	38	TANIMIZU et al., <i>Isolation of hepatoblasts based on the expression of Dlk/Pref-1</i> , Journal of Cell Science (2003), pp. 1775-1786, Vol. 116	
	39	XU et al., <i>γ-Glutamyltranspeptidase-Positive (GGT⁺) Hepatocytes from Carcinogen-Treated Rats Isolated by Magnetic Beads</i> , In Vitro Cell. Dev. Biol. (July 1991), pp. 515-517, Vol. 27A	

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